REMARKS

Applicants respectfully traverse and request reconsideration.

Various amendments have been made throughout the specification correcting cosmetic errors. Similarly, cosmetic errors have been amended in Figure 3, step 70. Moreover, Applicants have amended Figure 4 to include the subject matter discussed in detail on page 11, ll. 13-20 of the specification. In summary, Applicants have added steps 94 and 96 to Figure 4. Applicants respectfully note that no new subject matter has been introduced in the foregoing amendments.

Rejection Under 35 U.S.C. § 112, ¶6

Claims 33 and 38-41 stand rejected under 35 U.S.C. § 112, ¶ 6 for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention. The Office action states that with respect to claims 33 and 38-41, "the words 'first, second, third, [and] fourth' are preceded by the word 'means' in an attempt to use a 'means' clause to recite a claim element as a means for performing a specified function." (Page 2, ¶ 2). Relying on *Ex parte Klumb*, the Office action further states that "since no function is specified by the word(s) preceding 'means,' it is IMPOSSIBLE to determine the equivalents of the element. . . ." *Id.* (Emphasis added).

Applicants respectfully traverse this rejection, noting among other things the word "means" does not precede the words "first, second, third and fourth" as stated in the action. In contrast, the quantitative adjectives (first – fourth) serve as modifiers placed *before* the word "means." While it is true that the words "first, second, third and fourth" do not describe a function as required by 35 U.S.C. § 112, ¶6, Applicants respectfully note that the Office action appears to have misapplied the holding of *Ex parte Klumb*. According to MPEP 2181, *Ex parte*

Klumb stands for the proposition that "'printing means' and 'means for printing' . . . have the same connotation."

In light of the above, Applicants submit that the Examiner has overlooked the functional language in claims 33 and 38-41. Specifically, Applicants draw the Examiner's attention to the language following the preposition "for" in each of the means-plus-function clauses. For instance, claim 33 describes, among other things, "first means for ***storing programming instructions that cause a coupling controller of the processing unit to receive display preferences regarding the multiple displays***." (Claim 33, Emphasis added). Applicants respectfully note that the highlighted language above serves as an example of functional language in claim 33. Similar functional language is found in the remaining means-plus-function clauses of claims 33 and 38-41.

As a result, the § 112, ¶6 rejection appears to be improper; Applicants respectfully solicit its withdrawal. Because Applicants have shown that claims 33 and 38-41 contain functional language, determining the equivalents of the elements is not impossible. As a result, Applicants respectfully reassert the relevant remarks made in the previous Office actions requesting the Examiner to follow the Supplemental Examination Guidelines for claims under 35 U.S.C. § 112, ¶6. "Applicant[s] submit[], that in accordance with the Guidelines, it is Examiner's responsibility to determine the equivalence that the . . . means plus function clause provides. In the present case, the Examiner has asserted that it is impossible to determine equivalence, wherein Applicants direct the Examiner to, among other places, FIG. 3 and the associated discussion beginning on page 9, line 17" of Applicants' specification. (Response filed 12/04/03, Page 12, ll. 1-3).

Rejection Under 35 U.S.C. § 103(a)

Claims 24, 29, 31-33, 38, 40-46 48, 52 and 56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable under Zenda, USPN 4,980,678 ("Zenda"). Prior to addressing the merits of this rejection, Applicants wish to reassert the relevant remarks made in the previous Response filed 12/04/03. Specifically, Applicants resubmit that Applicants are unaware of a currently pending claim 56 in the present application. As a result, the rejection as to claim 56 is moot and should be withdrawn.

The Zenda reference has been characterized in Applicants' previous Responses. Applicants respectfully reassert the relevant remarks made with respect to Zenda. In addition, Applicants submit that Zenda is explicitly limited to a system capable of displaying an image on one of a CRT ***OR*** a plasma display apparatus ("PDP"). The reference fails to disclose Applicants' claimed invention requiring, among other things, the simultaneous display of an image or a series of images on multiple displays.

In support of Applicants' aforementioned statement that Zenda does not teach or suggest a system capable of simultaneous display, Applicants draw the Examiner's attention to Zenda, Col. 3, ll. 21-26 and FIG. 1 which collectively disclose that "when the display apparatus in use is a CRT, CRT palette data is read out from buffer 5 by CPU . . . . Similarly, when PDP is in use, PDP palette data is read out from buffer 7 and set in palette . . . ." The Zenda reference also teaches that the CRT controller (CRTC, FIG. 1, element 25) *selectively* (i.e., one or the other) display drives CRT and PDP displays *based on* display timing signal generating parameters (PDs). (Col. 3, ll. 44-51; emphasis added). As a result, the reference states that when one of the displays is chosen, "PDs for a corresponding display (PDP 21 ***or*** CRT 19) are set in register 27 in CRTC 25 in accordance with the timing control . . . under the control of the CPU." (Col. 4, ll 57-64; emphasis added). Applicants respectfully submit that the foregoing arguments establish

that only one of the CRT or PDP displays can be driven in accordance with the type of PDs that are set in register 27.

Moreover and with respect to alternate configurations, Zenda again appears to be limited to a system capable of driving only one of a CRT or a PDP. Applicants draw the Examiner's attention to Col. 7 and to FIGS. 9 and 11A-11B. FIG. 9 shows a CRT and PDP palettes connected in series and FIGS. 11A and 11B illustrate the operation of the alternate configuration briefly described above. In Steps 75 and 89 of FIG. 11A and 11B, respectively, the operation of the FIG. 9 configuration shows that the system must determine whether the CRT is selected or whether the PDP is selected. If the CRT is selected, Steps 77 –81 are performed. HOWEVER, and in direct contrast to the Office action's assertions, if the PDP is selected, a separate and unique series of steps is performed (Steps 83-89). (*See also* Col. 7, ll. 2-49 describing in detail what occurs when the PDP is selected; Col 7, ll. 49-58 describing in detail what occurs when the CRT is selected.)

Summarizing the operation of FIG. 9, Zenda states that "when a designation is made to perform display using only PDP, CRT executes only gradation display of PDP using PDP palette. *On the other hand*, when a designation is made to perform display using only CRT, CPU performs display on only CRT using CRT palette." (Col. 7, ll. 59-64). Applicants respectfully believe that this language explicitly makes clear that only one of a CRT or a PDP can be selected, and NOT both. Zenda chose the expression, "on the other hand" to indicate that there are only two options, just like there are only two hands of a human. Therefore, the first option (the first hand) is to selectively drive the PDP display. The second distinct option (the other hand) is to selectively drive the CRT display.

While Zenda also teaches that "in this manner, one or both of the CRT and PDP are selectively display-driven," Applicant respectfully notes that this is an explicit reference to the ability of the system illustrated in FIG. 9 to drive a CRT (Steps 75-81) and then alternatively drive the PDP (Steps 83-89) and not both simultaneously. The Zenda reference appears to be silent as to teaching the simultaneous display of both the CRT and the PDP. Neither the written description (i.e., Col. 7 in particular) nor the flow chart of FIGs. 11A and 11B teach or suggest the simultaneous display of both the CRT and the PDP.

Therefore, and with respect to claim 24, Applicants respectful reassert the aforementioned arguments which establish that Zenda merely discloses a system capable of driving one of a CRT or a PDP display. In contrast, Applicants claim, among other things, the ability of the display controller to "simultaneously provid[e] display data to the multiple displays." (Claim 24, element (d)). As stated above, Zenda selectively drives one of either the CRT or the PDP displays based on the PDs (the display timing signal generating parameters). (Col. 3, ll. 44-51). The reference teaches that there are two types of PDs, i.e., one type for CRT display and a second type for PDP display. (*See* Col. 4, ll. 58-61 teaching that there are corresponding PDs for each display). As a result, Applicants submit that Zenda does not teach or suggest simultaneous display.

Furthermore, there does not appear to be anymotivation within Zenda to provide a system capable of simultaneously driving two displays. In fact the reference appears to teach away from Applicants' claimed invention by establishing that either the CRT or the PDP is selectively display driving based upon the PDs stored in the register 27. Applicants respectfully submit that the assertion that it would have been obvious to modify Zenda's separate display including simultaneous display for two displays as claimed in the instant application, is little more than

hindsight analysis. Applicants respectfully request a showing in the prior art establishing that it would have been obvious for one of ordinary skill in the art to modify the Zenda reference so as to drive two or more displays simultaneously as claimed.

In addition, the Office action references gates 55 and 57 as teaching Applicants' step (c) of claim 24. Step (c) teaches that the coupling controller "configure[s] the computing system and the multiple displays in accordance with the display preferences when the display preferences can be fulfilled, and reconfigure[s] operable coupling of the multiple displays to the computing system such that the multiple displays are configured in accordance with the display preferences when the current configuration can be reconfigured." However, Applicants submit that the gates 55 and 57 do not teach or suggest Applicants' claimed step. In contrast, the gates 55 and 57 correspond to write control gates that are "alternately enabled to selectively perform *write access* of palette data [to] a corresponding palette." (Col. 6, ll. 25-30). Applicants respectively note that controlling write access to a memory palette is *not analogous* to configuring or reconfiguring the computing system and multiple displays. Moreover, the Zenda reference does not appear to configure or reconfigure any system. In fact, the reference merely alternately writes multicolor display palette data and gradation display palette data to the appropriate palette for display.

In addition to mischaracterizing Applicants' steps (c)-(d), the Office action appears to be silent as to Applicants' steps (b), and (e)-(f). The Office action does not appear to discuss display preferences, configuration properties of multiple displays and configuration properties of the computing system. Moreover, the action does not discuss the interaction of the display controller and the screen memories. For the foregoing reasons, Applicants earnestly believe that claim 42 is in proper condition for allowance.

With regard to claim 33, Applicants respectfully reassert the relevant remarks made above with respect to the 35 U.S.C. § 112, ¶6 response and with respect to claim 24. For the following reasons, the rejection appears to be improper. Claims 33 stands in proper condition for allowance.

Claims 29, 31-32 and claims 38, 40-41 are dependent upon allowable claims 24 and 33, respectively. Furthermore, claims 29, 31-32 and claims 38, 40-41 contain patentable subject matter not present in Zenda. Therefore, the aforementioned dependent claims are in proper condition for allowance for the same reasons as claims 24 and 33.

Moreover and with regard to claims 29 and 38, while the Zenda reference shows a CRT pallet for CRT display and a separate PDP pallet for PDP display, the reference fails to teach or suggest a video graphics processing circuit "wherein the memory further comprises *programming instructions that cause the processing unit to operably couple* a first display controller . . . to a first display . . . and operably coupling a second display controller . . . to a second display." In contrast, Zenda teaches a system that is inflexible to such programming instructions; the pallets are required to be coupled to the displays.

With regard to claims 31 and 40, Applicants repeat the relevant remarks made above with respect to claims 29 and 38. The rejection fails to anticipate or render obvious the claimed limitations requiring the processing unit to "operably couple a first display controller . . . to a first display . . . and . . . operably coupling a second display controller to a second display." Furthermore, Applicants submit that the Office action appears to neglect Applicants' limitation requiring, among other things, that the programming instructions cause the processing unit to "operably couple the first and second display controllers to one of the screen memory." As such the rejection is improper and should be withdrawn.

With regard to claims 32 and 41, Applicants respectfully repeat the relevant remarks made above with regard to claims 31 and 40. Applicants further note that Zenda does not teach Applicants' claimed limitation regarding programming instructions that cause the processing unit to "operably couple at least two of the displays to one of a plurality of screen memories."

With respect to claim 42, Applicants reassert the relevant remarks made above with respect to claim 24. Moreover, Applicants submit that the write access gates 55 and 57 as discussed *infra* with respect to claim 24 are not coupled to a plurality of displays as stated in the Office action. In contrast, the write access gates are coupled only to the CPU (via system bus 3) and to the CRT or PDP palletes (elements 12 and 14, respectively). As a result of their structure and associated function (described above), the write access gates are not analogous to the coupling module claimed by Applicants.

Furthermore, Applicants contest the Office action's assertion that D-flip-flop 59 and decoder 61 are analogous to Applicants' coupling controller. Applicants respectfully note that the action is silent as to display preferences received by the coupling controller and claimed by Applicants. A signal sent by the CPU telling the flip-flop to write to one of the CRT pallet or the PDP pallet is not analogous to "display preferences including at least one of displaying an image on more than one of the displays, displaying separate images on each of the displays . . . ." (Claim 42).

As a result, Applicants believe that claim 42 stands in proper condition for allowance. Claims 43-46 and 48 are dependent upon allowable base claim 42 and are therefore also believed to be in proper condition for allowance.

With regard to claim 43, Applicants respectfully note that the Office action is silent as to a coupling module and therefore is silent as to graphics engine operably coupled, *via the*

coupling module, to at least one of the plurality of display controllers and at least one of the display drivers as required by Applicants' claimed invention. Moreover, the Office action's assertion that the PD setting control circuit and CRT controller is analogous to Applicants' graphics engine is improper because it is coupled to only the CPU and the V-RAM and not either of the plurality of display controllers or the display drivers.

With respect to claim 44, Applicants further note that while Zenda teaches a keyboard, the reference is silent as to receiving display preferences from a user. The user in Zenda is limited to telling the system which display to drive. In contrast, the display preferences of Applicants' claimed invention are more encompassing as delineated in claim 42.

With respect to claim 46, Applicants reassert the relevant remarks made with respect to claim 29.

With respect to claim 48, Applicants reassert the relevant remarks made with respect to claim 31.

With respect to claims 49-53, Applicants reassert the relevant remarks made above. Claims 49-53 are allowable over Zenda.

With respect to claim 51, Applicants reassert the relevant remarks made with respect to claim 44.

With respect to claim 52, Applicants note that the Office action does not specifically provide a citation with Zenda which renders obvious Applicants' claimed invention. In other words, Applicants submit that while Zenda teaches use of either a CRT display or a PDP display, it does not teach an apparatus "wherein the screen memory further comprises configuration memory that stores the configuration properties of the plurality of displays, the configuration

properties including at least one of: *display refresh rate*, *display resolution*, and *type of display*." (Emphasis added.)

With respect to claim 53, Applicants reassert the relevant remarks made above with respect to claims 29 and 31.

Claims 30, 39 and 47 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zenda in view of Zenda, U.S. Patent no. 5,559,525 ("Zenda '525"). Applicants reassert the relevant remarks above. Furthermore, Applicants respectfully note that the combination of Zenda and Zenda '525 would not teach or suggest all of the claimed limitations of Applicants' invention. In contrast, the combination would suffer from being incapable of simultaneously driving multiple displays as described *infra*. As a result, while Zenda '525 discloses a third CRT display, Applicants submit that claims 30, 39 and 47 are in proper condition for allowance.

Accordingly, Applicant respectfully submits that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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